

FIG 2

SCANNED # 22

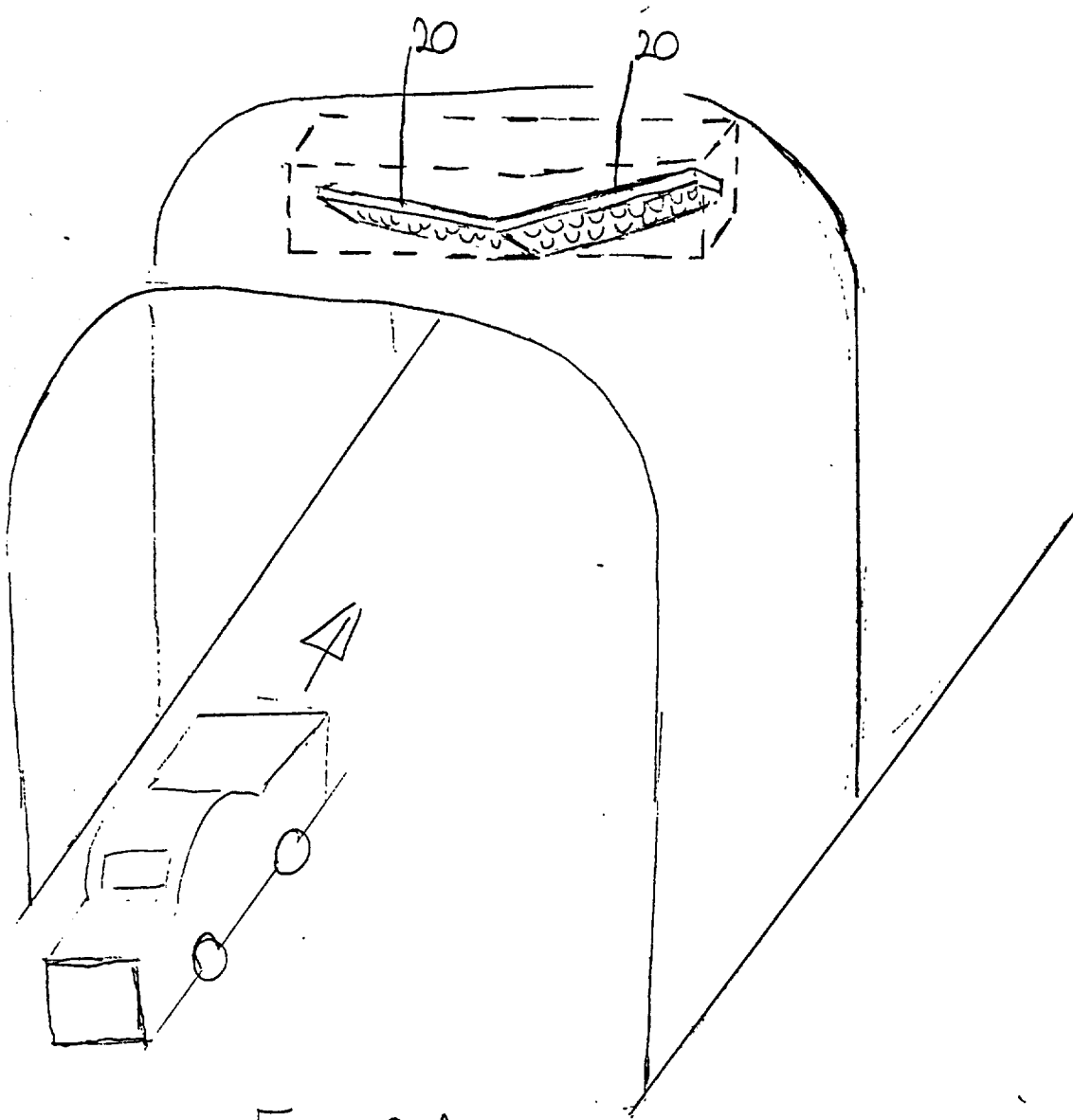
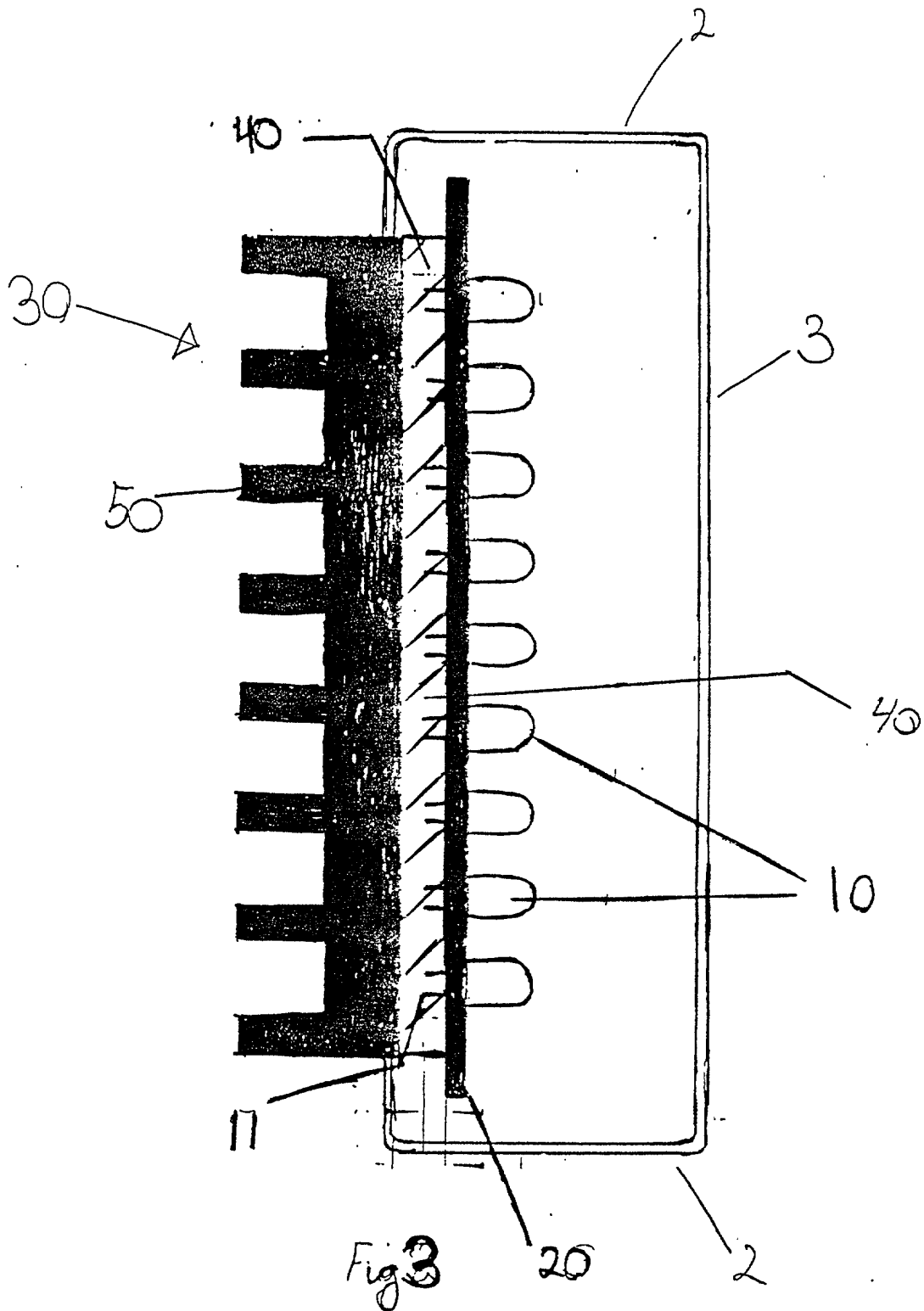


FIG 2A



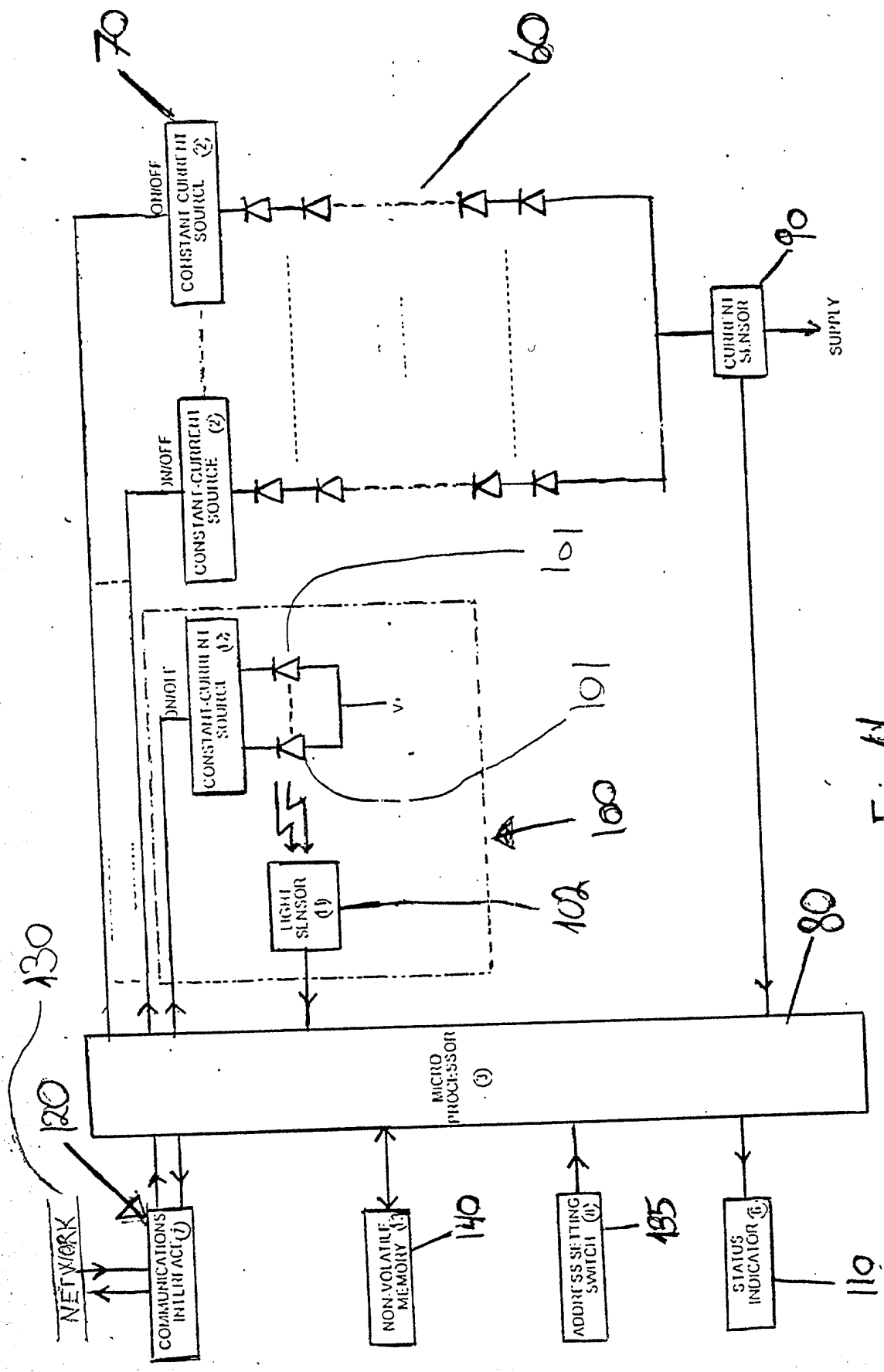


Fig. 4

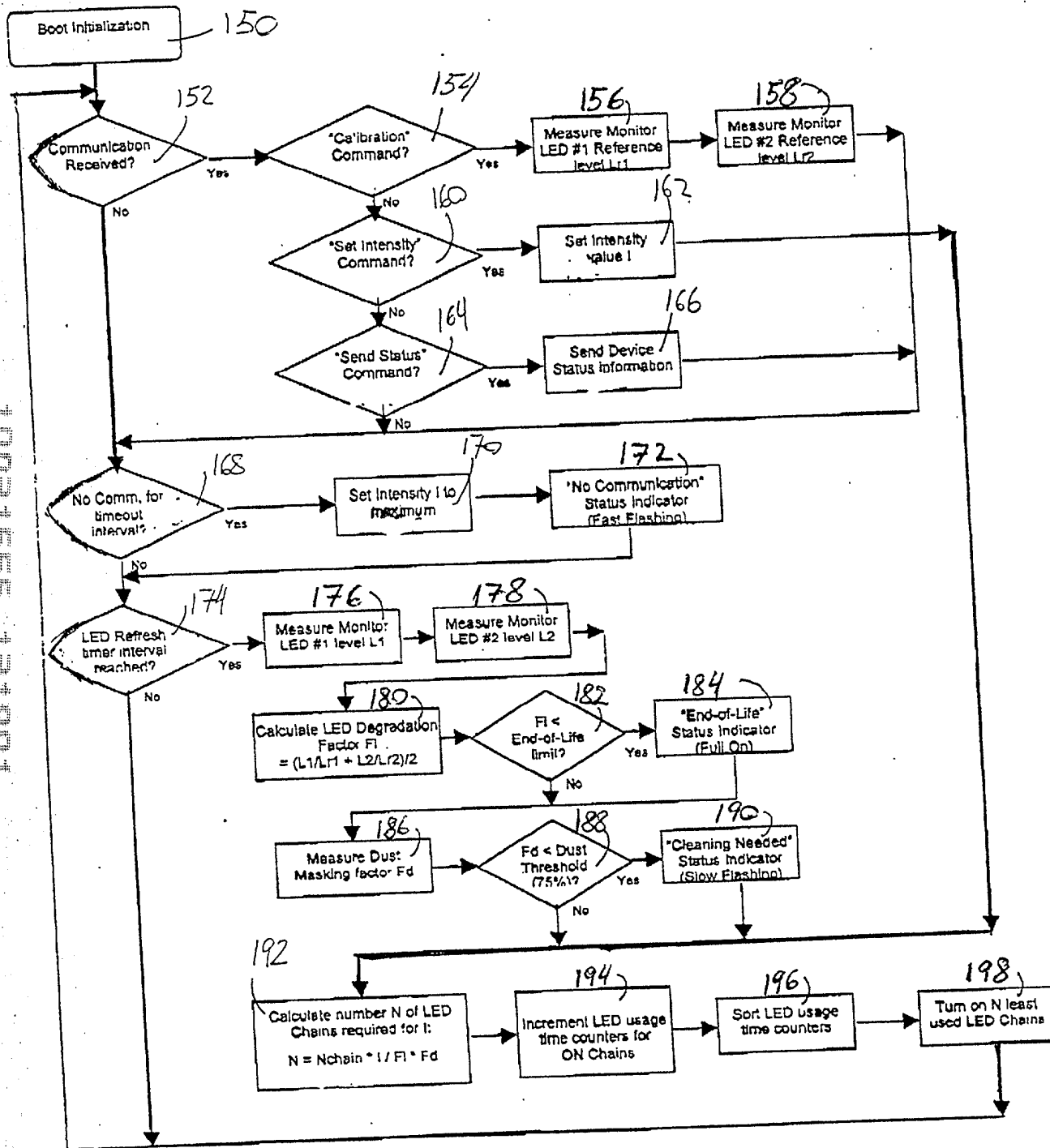


Fig 5

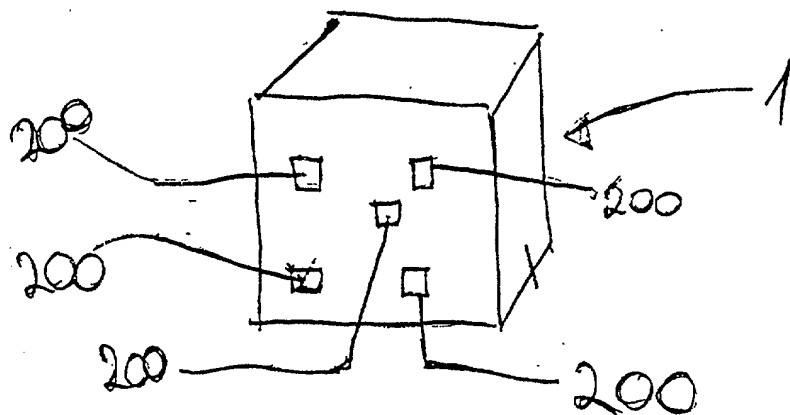


FIG 6

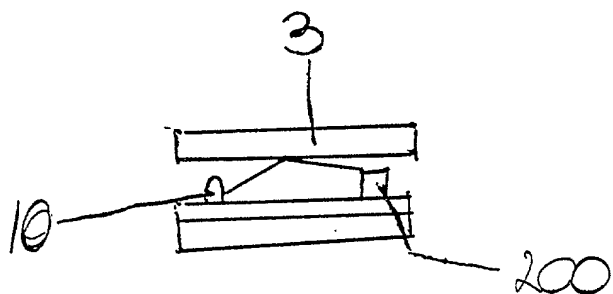


FIG 7

FIG. 8 is a schematic diagram of a test circuit for a relay. The circuit includes a micro-processor 80, a test relay 210, and a plurality of C.C. sources 60. The micro-processor 80 is connected to the test relay 210 via a Test Relay Activation line and a Vtest Sense line. The micro-processor 80 is also connected to the C.C. sources 60 via a bus line 80. The C.C. sources 60 are connected to the test relay 210 via a bus line 60. The test relay 210 is shown in a dashed box and includes a Normal contact and a Test contact. The Normal contact is connected to the C.C. sources 60 and the Test contact is connected to the micro-processor 80 via the Vtest Sense line.

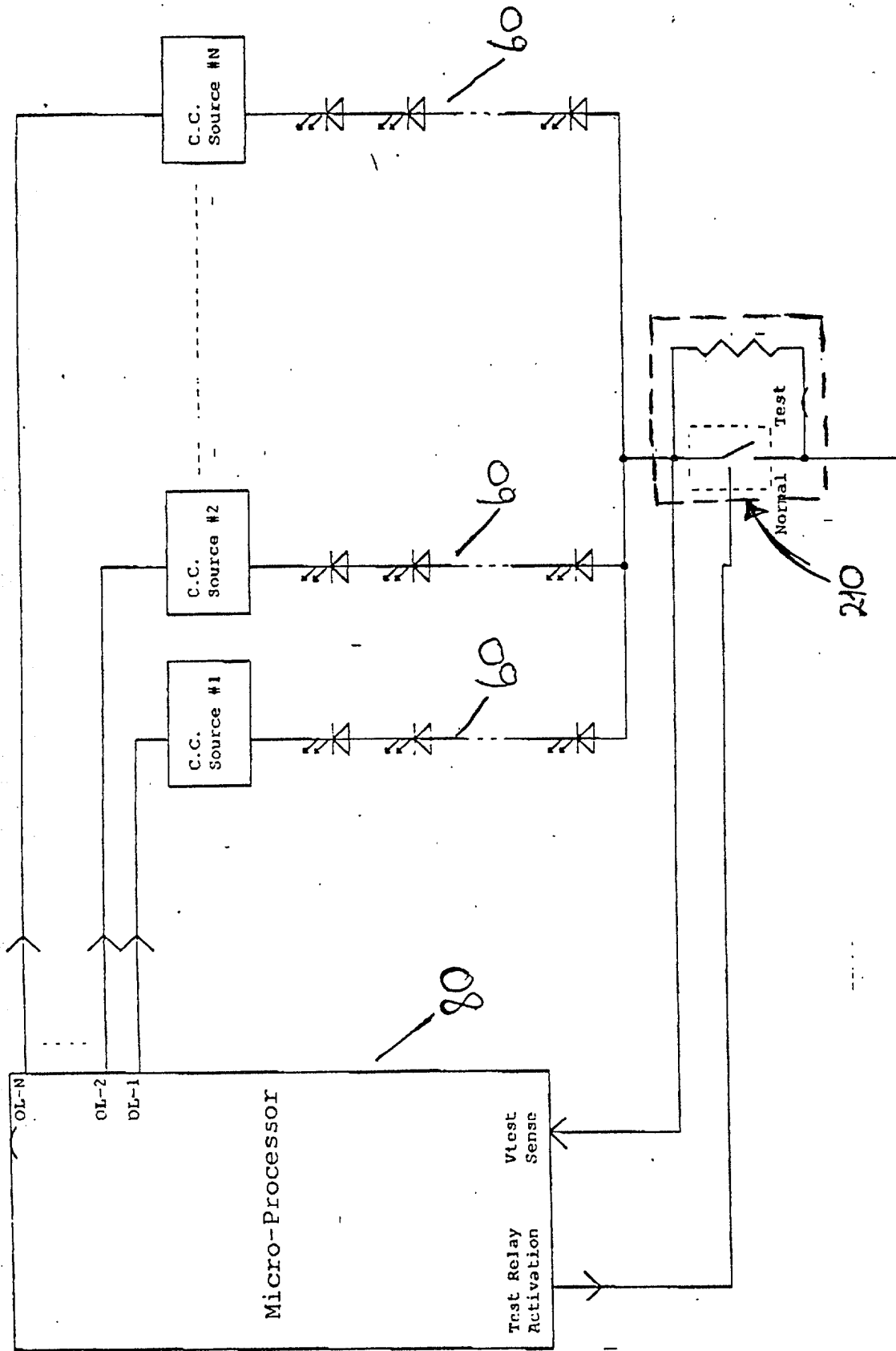


Figure 8



NOTES: 1. THE MICRO-PROCESSOR UNIT IS A 16-BIT, 100-KHZ, CMOS, 4004. 2. THE C.C. SOURCES ARE 1.5V, 100-MA, CMOS, 4004. 3. THE C.C. SOURCES ARE 1.5V, 100-MA, CMOS, 4004.

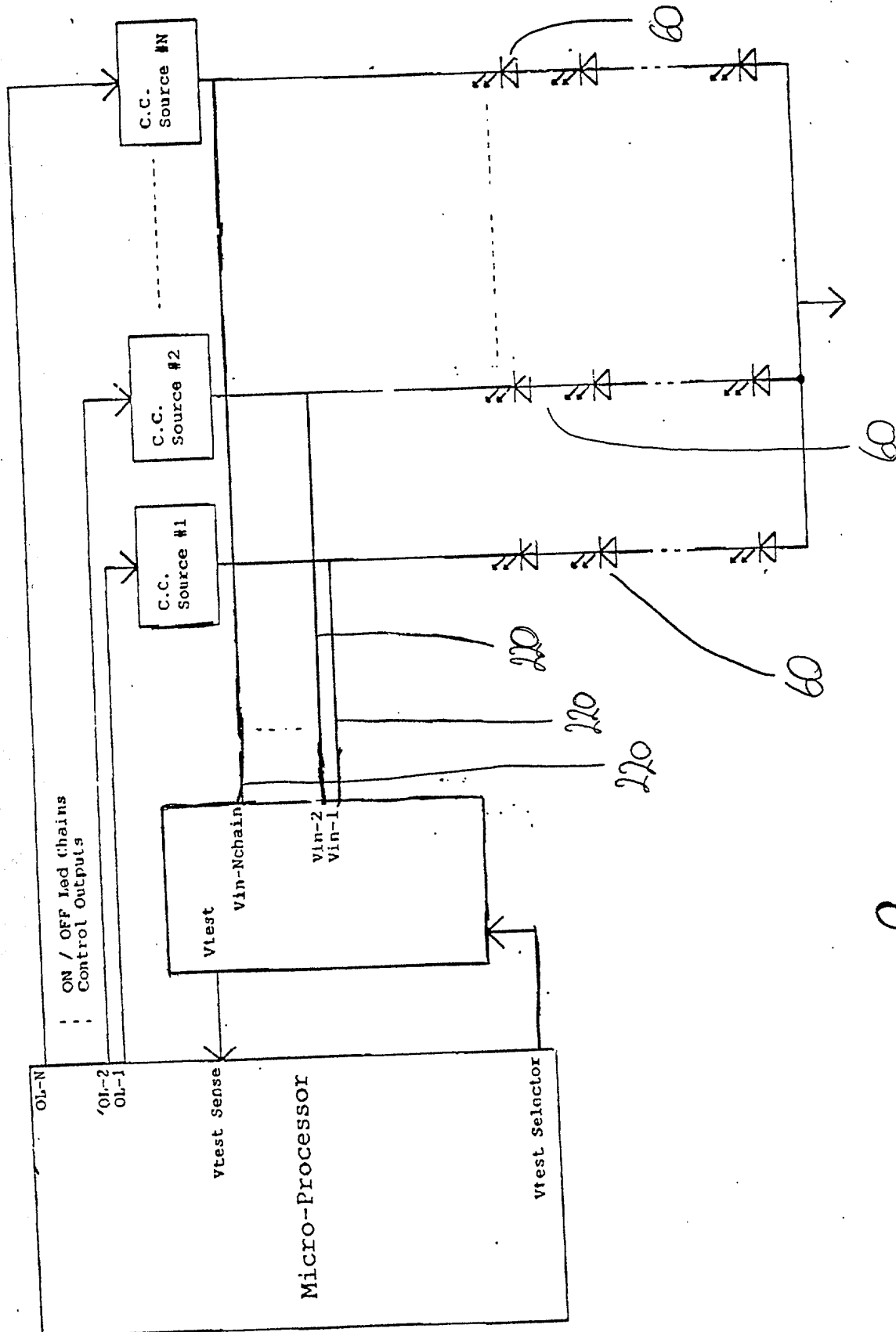


Figure 9

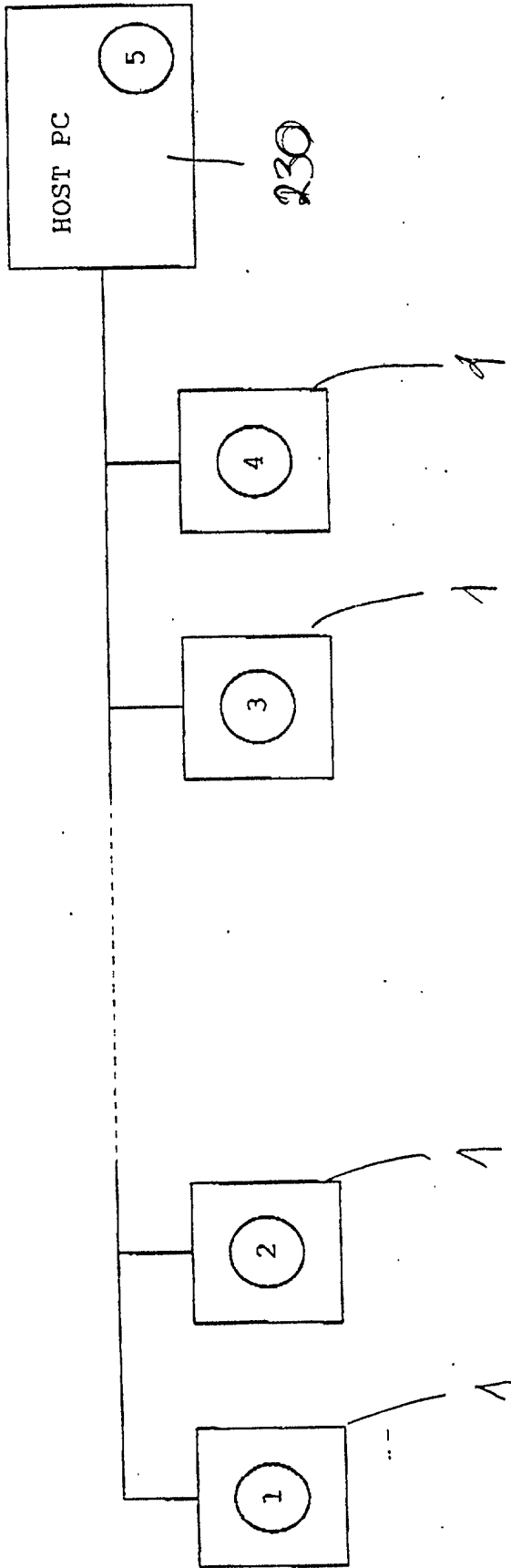


Figure 10

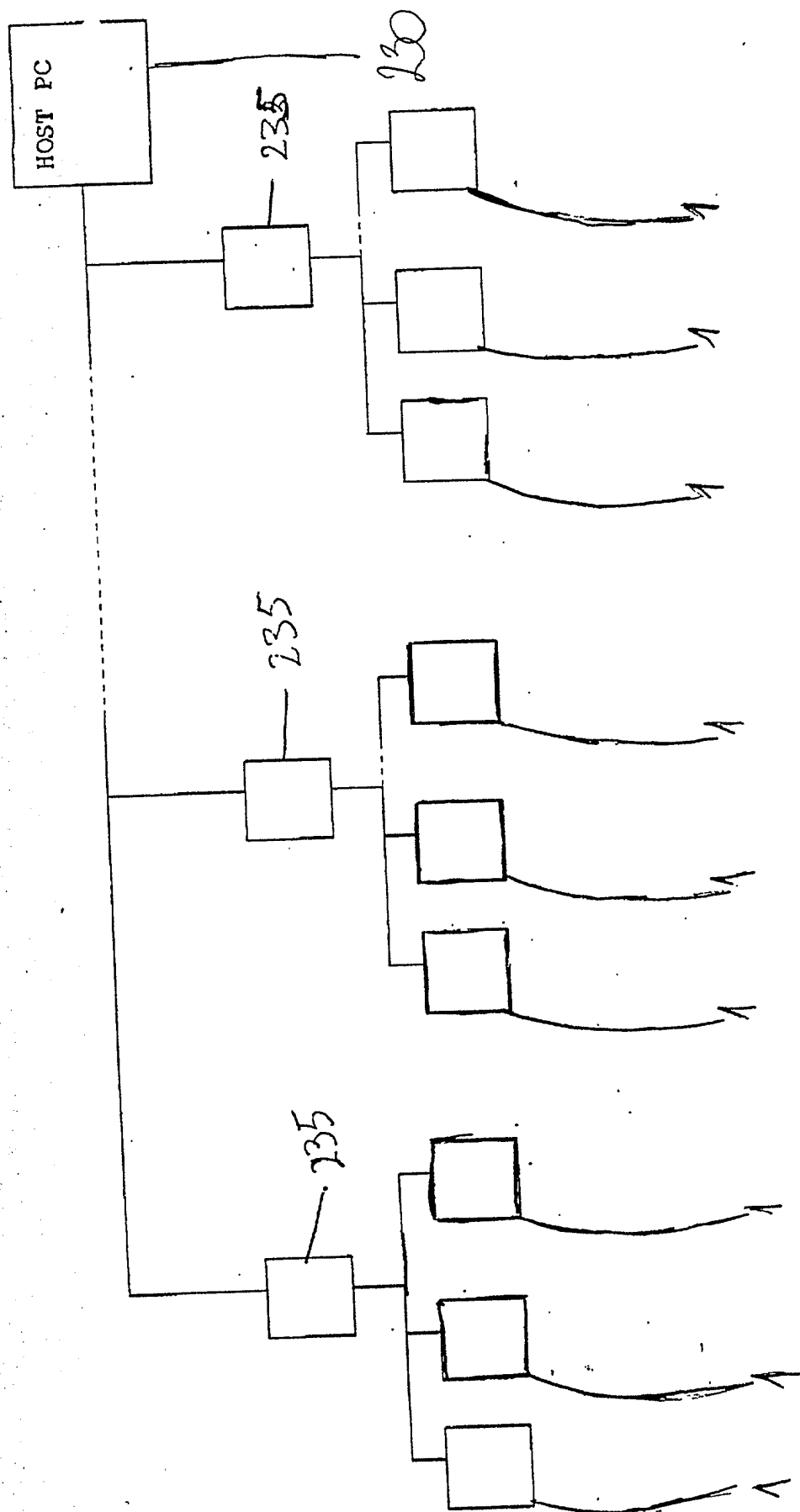


Figure 11



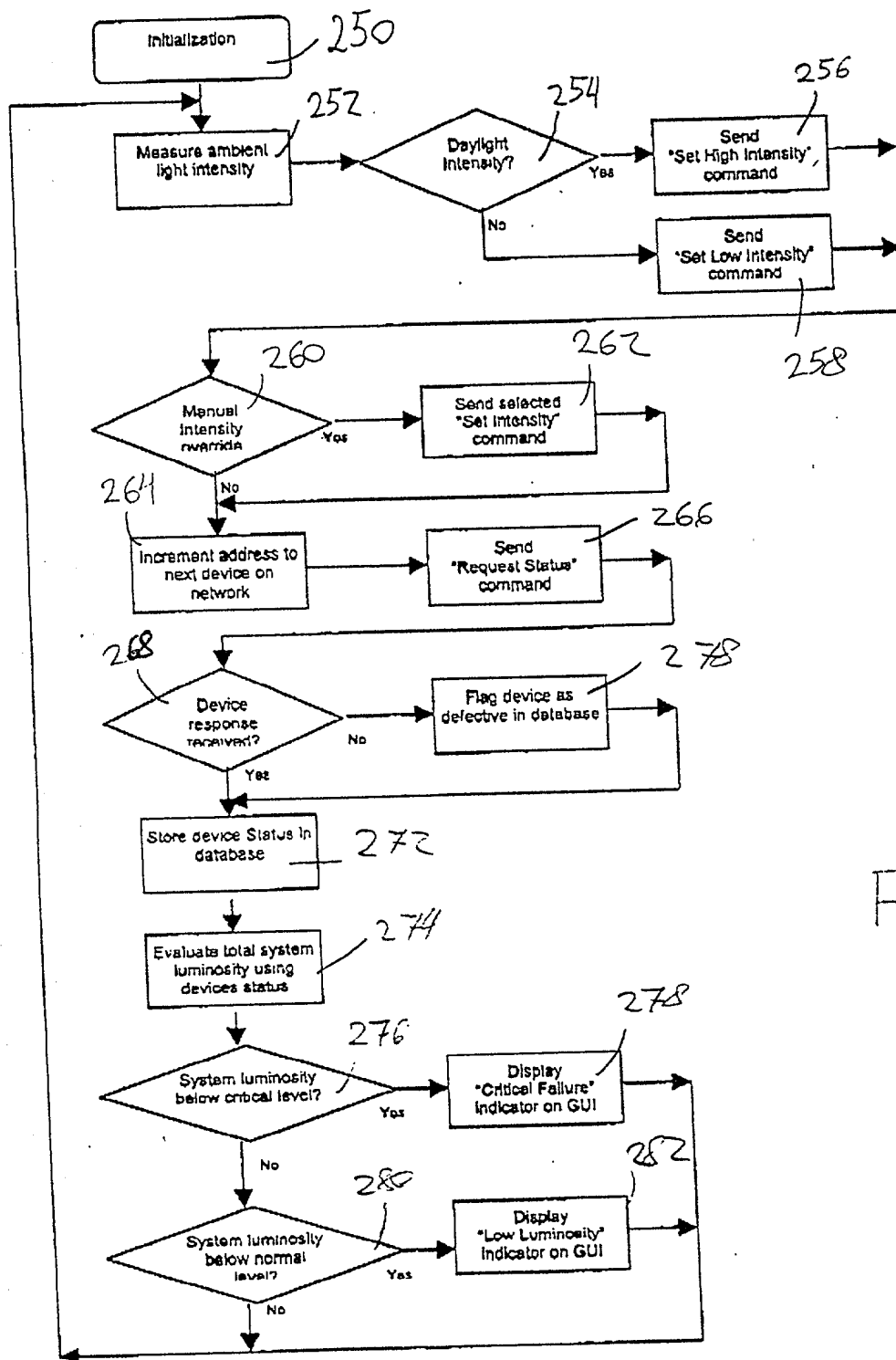


FIG 13

FIG. 14A is a schematic diagram of a system for measuring the thickness of a material. The system includes a light source 140, a light detector 142, and a material 144. The light source 140 emits a light beam 146 that passes through the material 144 and is detected by the light detector 142. The thickness of the material 144 is denoted by the dimension 148.

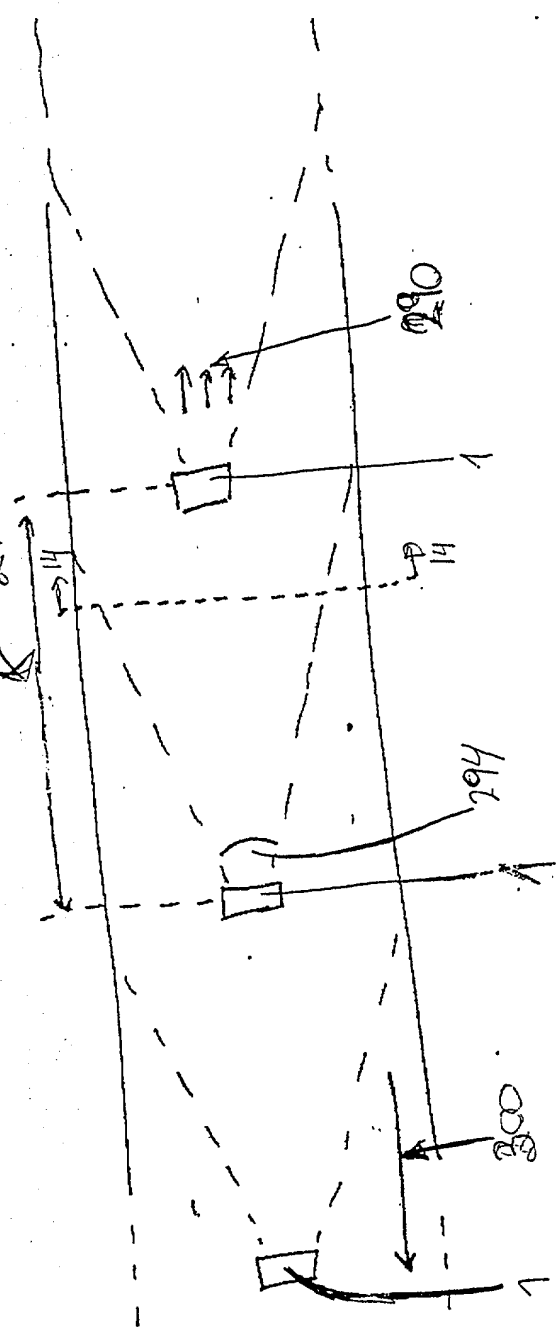


FIGURE 14A

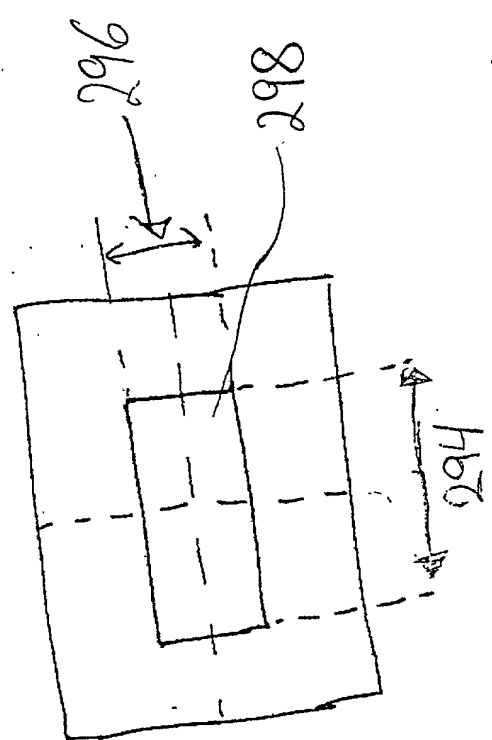


FIGURE 14B

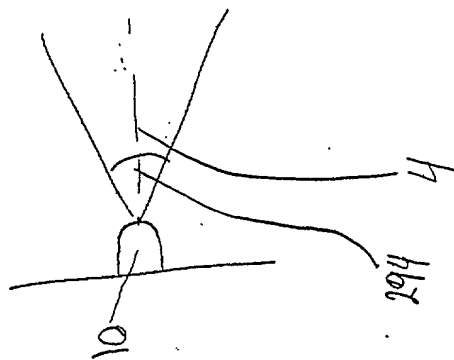


FIG 15A

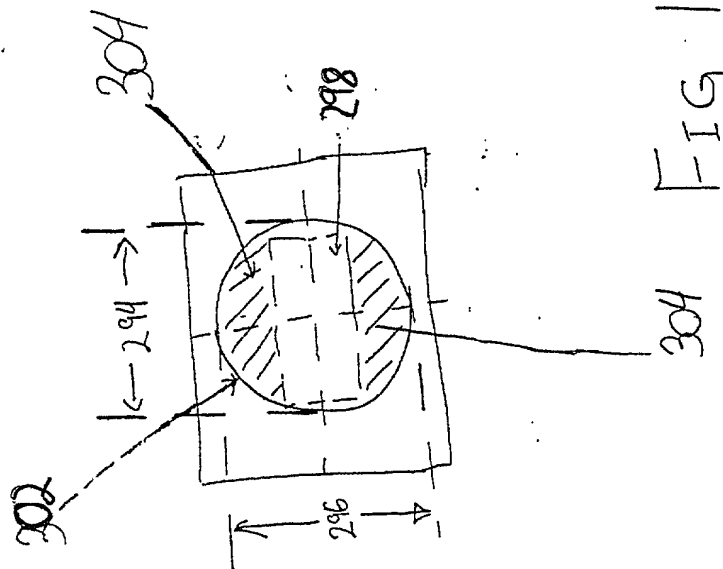


FIG 15B





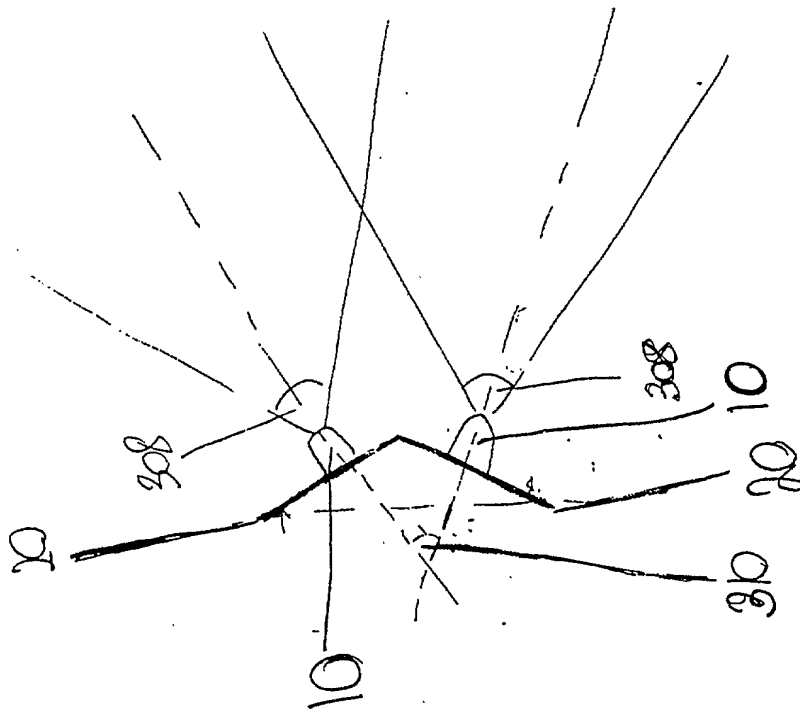


FIG. 17A

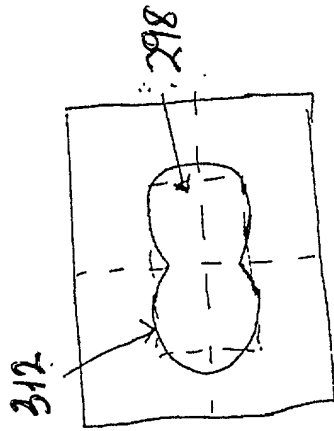


FIG. 17B

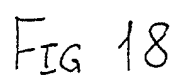


FIG 18